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Annual Report to the President and the Congress on the State Energy Conservation Program for Calendar Year 1981

July 1982

Submitted in Accordance with
Title III, Part C, Section 365(c)
of the Energy Policy and Conservation
Act, as amended, 42 U.S.C. 6325

United States Department of Energy
Assistant Secretary for Conservation
and Renewable Energy
Office of Energy Management and Extension

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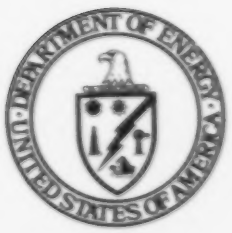
Prepared by the
United States Department of Energy
Assistant Secretary for Conservation
and Renewable Energy
Office of Energy Management and Extension
Washington, D.C. 20585



THE SECRETARY OF ENERGY
WASHINGTON, D.C. 20585

JUL 0 2 1982

This report is submitted to the President and the Congress, with copies to the Governors of the States, in compliance with Section 365(c), 42 U.S.C. 6325(c), of the Energy Policy and Conservation Act (EPCA), Pub. L. 94-163, December 22, 1975.

Reported are the activities for the period December 1980 through December 1981 of the State Energy Conservation Program, 42 U.S.C. 6321 et seq., established by Title III, Part C of the Energy Conservation and Production Act, Pub. L. 94-385, August 14, 1976.

Included in this report, as required by EPCA, are discussions regarding estimates of the energy conservation achieved, and the degree of State participation and achievement.

James B. Edwards

EXECUTIVE SUMMARY

The Energy Policy and Conservation Act, Public Law 94-163, Title III, Part C, Section 365 (c), and Section 301 of the Department of Energy Organization Act, Public Law 95-91, requires the Secretary of the Department of Energy to report annually to the President and the Congress on the operation of the State Energy Conservation Program (SECP), and to provide copies of such report to the Governor of each State. The report is to include an estimate of the energy conservation achieved, the degree of State participation and achievement, a description of innovative conservation programs undertaken by individual States, and recommendations of the Secretary, if any, for additional legislation. This report responds to that requirement.

Under the SECP, a State may receive financial and technical assistance to carry out either a plan or supplemental plan or both. To be eligible for financial assistance, the plan must be designed to achieve scheduled progress toward a specific energy goal for the year 1980 and must include five required program measures. States may also propose to include in a plan any additional program measures which contribute to energy conservation.

On March 29, 1979 the Department of Energy consolidated and simplified guidelines for the SECP (44 FR 20055, April 4, 1979).

The year 1981 was the sixth year of operation of the SECP. A total of $256.3 million in funds from FY 1976 through FY 1981 have been appropriated and grants awarded to 57 participating grantees. Grants for developing plans were awarded in 1976. Plans have been received, approved and funded for implementation in 1977, 1978, 1979, 1980 and 1981. The basic and supplemental plans were continued through FY 1981 by the FY 1981 Appropriations for the Department of Interior and Related Agencies, Pub. L. 96-514, December 12, 1980.

The legislative goal for the SECP was to reduce the 1980 forecasted energy consumption of 82.1 quadrillion Btu's (quads) by 5 percent or 4.1 quads. The targets that the States set in their 1980 conservation plans totaled 5.2 quads. The year 1980, as set out in Section 362 of ECPA, is a point of reference, or baseline, upon which to calculate a specific energy savings amount also achievable in 1981. The total energy savings estimated by the States at the end of 1981 was 3.2 quads. These numbers represent an aggregation of State reported data calculated using DOE approved methodologies. These methodologies do not, however, account for the impacts of a downturn in the State economy or increases in energy prices, thereby overstating the impact of the State measures. Nonetheless, in an overall effort to improve the quality of energy savings estimates, DOE has provided individualized technical assistance to each State in order to help them improve their energy savings data collection techniques.

Although there continues to be a shortfall from the 1980 goals, substantial progress has been made. When the SECP began in 1976, there was very little organized capacity within the States for energy conservation planning and implementation. Since then, States have redirected their concerns from those of fuel allocation to the long term concerns of energy management and conservation in a cost-effective manner.

Compliance with required measures with the exception of building lighting and thermal efficiency standards for new buildings has been achieved in 1981.

The Administration's request for zero-funding in FY 1982 had significant repercussions on the State Energy Offices in FY 1981. Many States elected to consolidate program measures, cutdown outside contracts, and reduce staff during the year. States concentrated on successful program measures that were previously operational and postponed additional innovative programs. Many of the innovative programs reported on in FY 1980 Annual Report (Chapter IV, pp. 13-22) continued into 1981 and will not be repeated again in this year's report.

As States have become increasingly able to develop and implement conservation activities, the Administration believes that there is a lessening need for Federal assistance. Reflecting this belief, the FY 1983 budget request does not include program funding for the State Energy Conservation Program.

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CHAPTER I
INTRODUCTION

When first enacted, Part C of Title II of the Energy Policy and Conservation Act (EPCA), 42 U.S.C. 6321 et seq., provided financial assistance to develop, modify or implement State energy conservation plans ("plans"). Part C was subsequently amended by Part B of Title IV of the Energy Conservation and Production Act (ECPA) 42 U.S.C. 6851 et seq., which provided financial assistance to develop, modify or implement supplemental State energy conservation plans ("supplemental plans"). Together, the EPCA provisions regarding plans and the ECPA provision regarding supplemental plans constitute the program for State energy conservation plans ("SECP"). In 1981 Congress provided reduced funding for continuation of the SECP through fiscal year 1982.

Regulations for the program, 10 CFR Part 420, were promulgated by the Federal Energy Administration ("FEA") on February 20, 1976 (41 FR 8335, February 26, 1976); October 28, 1976 (41 FR 48325, November 3, 1976); and May 13, 1977 (42 FR 26413, May 24, 1977). The Department of Energy ("DOE") amended the guidelines for SECP in order to consolidate and simplify the guidelines on March 29, 1979 (44 FR 20055, April 4, 1979).

Under SECP, a State may receive financial and technical assistance to carry out either a plan or supplemental plan, or both. To be eligible for financial assistance for implementation, the plan must be designed to achieve scheduled progress toward a specific energy goal for the year 1980 and must include the five required program measures specified in EPCA. To be eligible for financial assistance for implementation, the supplemental plan must include the three required program measures specified in ECPA.

States are in a unique position to effect immediate and substantial reductions in the rate of growth of energy demand through State laws, policies, programs and procedures designed to conserve energy. The States are best able to design energy conservation programs that both satisfy their own unique conditions and requirements and minimize any adverse impacts that might arise from changing patterns of energy use.

For purposes of this program, a State is defined as any one of the 50 States, the District of Columbia, Puerto Rico, The Virgin Islands, Guam, American Samoa and the Trust Territory of the Pacific Islands (TTPI). The Northern Mariana Islands (NMT) became eligible for participation in the program in FY 1979 pursuant to Title V of the Omnibus Territories Act, Pub. L. 95-134, October 15, 1977. The Trust Territory of the Pacific Islands elected to begin participation in 1980.

The program requires participating States to develop and implement plans that will reduce projected energy consumption in each State. The overall statutory goal of the program was to achieve a 5 percent, or more, reduction in the projected energy consumption for the baseline year of 1980.

To be eligible for financial assistance, a plan under EPCA must include the following measures:

(1) mandatory lighting efficiency standards for public buildings (except public buildings owned or leased by the United States);

(2) programs to promote the availability and use of carpools, vanpools, and public transportation (except that no Federal funds provided under this part shall be used for subsidizing fares for public transportation);

(3) mandatory standards and policies relating to energy efficiency to govern the procurement practices of such State and its political subdivision;

(4) mandatory thermal efficiency standards and insulation requirements for new and renovated buildings (except buildings owned or leased by the United States); and

(5) a traffic law or regulation which, to the maximum extent practicable consistent with safety, permits the operator of a motor vehicle to turn such vehicle right at a red stop light after stopping.

Each supplemental plan under ECPA must include the following required measures:

(1) procedures for carrying out a continuing public education effort to increase significantly public awareness of

- the energy and cost savings which are likely to result from the implementation (including implementation through group efforts) of energy conservation measures and renewable resources energy measures; and

- information and other assistance (including information as to available technical assistance) which is or may be available with respect to planning, financing, installing, and with respect to monitoring the effectiveness of measures likely to conserve, or improve efficiency in the use of energy, including energy conservation measures and renewable resource energy measures;

(2) procedures for insuring that effective coordination exists among various local, State and Federal energy conservation programs within and affecting such State, including any energy extension service program administered by DOE;

(3) procedures for encouraging and for carrying out energy audits with respect to buildings and industrial plants within such States.

Additional program measures may be proposed by a State for inclusion in a plan in order to help meet the State's energy saving goal. If approved by DOE, these additional measures may be implemented with Federal financial assistance.

CHAPTER II
PROGRAM OPERATIONS AND CONCLUSIONS

In 1976, grants for developing State energy conservation plans were awarded. Plans were received, approved and funded for implementation in 1977, 1978, 1979, and 1980. This section describes program funding, goals, progress and energy savings for 1981.

Funding

Appropriations for operation of the SECP through FY 1981 are as follows:

Fiscal Year	EPCA Base Program	ECPA Supplemental Program	Total ($000)
1976	$ 5,000	$ ---	$ 5,000
1977	23,000	12,000	35,000
1978	47,800	23,740	71,540
1979	47,800	10,000	57,800
1980	37,800	10,000	47,800
1981	29,900	9,300	39,200
Total	191,300	65,040	256,340

Table I details the dollars amounts awarded to States under SECP from 1976 - 1981.

Energy Savings to Date

Each State's plan is directly linked to scheduled progress toward, and achievement of, a State energy conservation goal of 5 percent or more of projected 1980 consumption. In 1976, each State estimated for its proposed energy conservation program measures the amount of savings it believed it could achieve in 1980. These estimates for each State were totaled and divided by a baseline consumption forecast for 1980 for each State in order to identify the individual State's goal. The national baseline consumption forecast for 1980 was 82.1 quadrillion Btu's or "quads." Five percent of this amount is 4.1 quads. State estimates of projected energy savings presented in their 1980 plans totaled 5.2 quads, or 6.3 percent of the baseline consumption forecast. According to the savings reports submitted by the States at end of 1981, the total reported savings achieved is 3.2 quads which is 3.9 percent of the 1980 baseline consumption forecast.

Energy savings achieved, compared to 1980 projections, varies from State to State and from program measure to program measure. The States employed various techniques to evaluate and estimate SECP energy savings achieved. DOE has provided standard methodologies for calculating energy savings for certain measures.

States can employ their own energy savings methodologies, subject to DOE approval. Each year DOE reviews States energy savings estimates to assure that the methodologies are being used properly. In an overall effort to improve the quality of energy savings estimated, DOE has provided individual technical assistance to each State in order to help them improve their energy savings data collection techniques. Nonetheless, the energy savings reported by the States do not take into account the impact of a downturn in the economy or the impact of increased energy prices. The net effect of the State measures is less than reported.

Appendix A shows the reported savings in 1981 for required and additional measures by States. Of the total reported savings achieved in 1981, 1.7 quads (53%) are associated with the eight required program measures, while the remaining 1.5 quads (47%) are attributable to additional program measures. Each State's reported savings for the required measures are displayed in Appendix B, and the additional program measures, combined by end use sector, are contained in Appendix C.

The shortfall in the achievement of the State 1980 energy savings goals was due to implementation difficulties of the required program measures. The primary problem was that the original estimates of the time required for effective implementation of some required program measures were overly optimistic. For example, in attempting to implement mandatory thermal and lighting efficiency standards for new buildings, account was not taken of the wide variations among States and their political subdivisions in the capabilities and resources required to adopt and implement these standards.

Program Progress

During the six years of operation SECP has succeeded in focusing the States' attention on energy conservation. The States are now able to provide comprehensive planning and implementation of energy conservation and renewable energy programs. Over 1000 separate program measures are currently being managed in a variety of sectors. In addition the SECP has provided a planning and implementing base for a number of other programs, including the Energy Extension Service and the Institutional Conservation Program.

Compliance with most of the required measures has been achieved. Slow progress continues in the implementation of mandatory lighting and thermal efficiency standards for new buildings due mainly to the fact that in many States, local governments have the jurisdictional responsibility for building codes.

All States have implemented carpools, vanpools and public transportation programs with the exception of the Trust Territories of the Pacific Islands (TTPI). TTPI did not begin implementation of the SECP until July 1980, when it received its first grant, and has not had the time to fully implement all mandatory measures.

- All States have implemented the energy office procurement practice measure.

- All States have implemented Right Turn on Red with the exception of New York, which is in compliance, and TTPI, CNMI, American Samoas and Guam, which have been given waivers due to the lack of signalized intersections.

- All States are in compliance with the three ECPA program measures, energy audits, public education and intergovernmental coordination, with the exception of TTPI for the reason mentioned above.

Conclusions

The State Energy Conservation Program was designed to provide States with the means to establish and implement energy conservation programs with the goal of reducing State energy consumption. The SECP has served to establish energy offices in the States to develop, and implement conservation and renewable resource activities. As States have become increasingly able to develop and implement such activities, there is a lessening need for Federal assistance. Consequently, the FY 83 budget request does not propose funding for the SECP program.

TABLE I

GRANTS AWARDED UNDER SECP 1976 - 1981

State	FY 1976 Planning Grants	FY 1977 Grants Base Program	FY 1977 Grants Suppl. Program	FY 1978 Grants Base Program	FY 1978 Grants Suppl. Program	FY 1979 Grants Base Program	FY 1979 Grants Suppl. Program	FY 1980 Grants Base Program	FY 1980 Grants Suppl. Program	FY 1981 Grants Base Program	FY 1981 Grants Suppl. Program
Alabama	$ 85,157	$ 383,000	$ 206,000	$ 820,000	$ 403,400	$ 820,700	$ 170,800	$ 648,200	$ 169,400	$ 488,900	$ 157,600
Alaska	48,514	129,000	70,000	277,800	137,700	292,200	57,800	229,500	57,900	172,900	53,700
American Samoa	44,975	105,000	56,000	216,500	109,100	214,000	45,600	164,600	44,900	124,100	41,700
Arizona	68,784	265,000	148,000	571,000	290,500	598,600	122,800	419,800	121,200	316,300	112,500
Arkansas	68,538	264,000	142,000	578,400	277,500	579,400	117,300	550,000	116,600	414,500	108,300
California	286,202	1,734,000	944,000	3,706,800	1,848,100	3,620,100	785,900	2,380,200	783,500	1,796,000	729,500
Colorado	73,230	295,000	161,000	577,000	315,800	574,300	133,600	458,300	132,400	346,200	123,500
Connecticut	80,726	346,000	183,000	632,900	359,000	618,400	152,000	480,300	150,500	362,100	139,900
Delaware	51,400	148,000	78,000	317,700	153,900	311,200	64,700	241,000	63,900	181,700	59,400
Dist. of Columbia	53,394	161,000	83,000	339,500	163,600	344,000	68,800	253,700	67,900	191,200	63,100
Florida	134,709	711,000	402,000	1,337,800	788,200	1,511,400	334,600	1,215,900	330,900	916,500	307,500
Georgia	100,785	482,000	260,000	908,800	509,000	917,000	215,800	732,900	215,100	551,800	199,500
Guam	45,816	110,000	59,000	225,200	114,900	220,800	48,100	169,700	47,200	128,600	44,300
Hawaii	54,403	168,000	91,000	322,200	178,600	319,300	75,200	247,100	74,200	186,200	69,000
Idaho	53,675	163,000	89,000	335,900	174,100	339,200	73,300	260,700	72,500	196,800	67,500
Illinois	176,446	992,000	519,000	2,168,000	1,015,400	2,095,900	431,000	1,688,500	428,500	1,273,900	399,000
Indiana	107,002	523,000	274,000	1,275,500	535,800	1,237,600	227,200	1,000,100	226,400	754,800	211,000
Iowa	78,708	332,000	173,000	692,000	339,000	605,500	143,500	562,600	142,600	425,200	133,300
Kansas	71,376	283,000	150,000	690,000	293,700	672,700	124,200	540,000	122,900	407,700	114,600
Kentucky	83,846	367,000	196,000	773,000	384,200	858,500	162,700	678,000	161,900	511,400	150,700
Louisiana	88,796	401,000	213,000	1,196,600	417,600	1,161,400	176,900	944,600	177,000	712,700	164,900
Maine	56,702	184,000	99,000	365,600	193,400	360,900	81,500	284,800	80,700	214,800	75,000
Maryland	92,386	425,000	226,000	818,000	442,100	800,900	187,300	616,000	185,600	464,400	172,500
Massachusetts	112,891	563,000	294,000	1,156,700	576,900	1,121,800	244,600	742,300	242,900	558,500	225,100
Michigan	150,733	819,000	431,000	1,884,600	843,500	1,834,200	358,100	1,490,800	357,000	1,123,400	331,600
Minnesota	90,356	411,000	218,000	829,200	427,700	916,400	181,200	725,100	179,700	547,500	167,700
Mississippi	71,400	283,000	152,000	554,500	297,300	573,900	125,700	452,900	125,100	341,800	116,600
Missouri	100,445	479,000	252,000	871,200	493,400	853,400	209,100	686,900	208,400	518,800	194,300
Montana	53,100	159,000	86,000	331,300	167,800	322,800	70,600	253,000	69,800	190,800	64,900
Nebraska	62,731	225,000	119,000	471,500	232,500	460,600	98,100	362,900	97,200	273,800	90,500
Nevada	51,071	146,000	80,000	316,800	156,200	315,300	65,600	248,100	64,900	186,900	60,300
New Hampshire	53,922	165,000	88,000	339,000	173,300	334,500	72,900	247,800	72,300	186,900	67,300

TABLE I

GRANTS AWARDED UNDER SECP 1976 - 1981 (Cont.)

State	FY 1976 Planning Grants	FY 1977 Grants Base Program	FY 1977 Grants Suppl. Program	FY 1978 Grants Base Program	FY 1978 Grants Suppl. Program	FY 1979 Grants Base Program	FY 1979 Grants Suppl. Program	FY 1980 Grants Base Program	FY 1980 Grants Suppl. Program	FY 1981 Grants Base Program	FY 1981 Grants Suppl. Program
New Jersey	$ 130,991	$ 685,000	$ 358,000	$ 1,246,700	$ 700,400	$ 1,321,500	$ 297,200	$ 1,086,800	$ 296,100	$ 818,100	$ 274,400
New Mexico	57,617	190,000	103,000	415,400	201,300	403,200	84,900	319,800	84,100	241,200	78,200
New York	258,900	1,549,000	802,000	2,670,300	1,570,100	2,670,400	667,300	2,175,400	664,300	1,636,700	615,500
North Carolina	106,498	520,000	281,000	1,108,300	549,300	1,078,900	232,900	866,500	231,600	653,600	215,500
North Dakota	52,150	153,000	81,000	299,200	158,900	293,400	66,800	229,000	66,000	172,800	61,500
N. Mariana Isl.	--	--	--	--	--	211,200	45,100	163,600	44,400	123,300	41,300
Ohio	170,522	952,000	496,000	1,891,400	971,800	1,833,300	412,700	1,482,500	411,200	1,118,500	382,800
Oklahoma	75,881	313,000	169,000	699,900	330,600	796,500	139,900	568,600	139,100	428,800	129,300
Oregon	70,743	279,000	151,000	563,000	295,300	571,500	124,800	487,300	123,800	367,600	115,200
Pennsylvania	184,259	1,045,000	545,000	2,185,000	1,066,600	2,079,100	453,100	1,694,000	449,500	1,277,500	418,100
Puerto Rico	79,259	336,000	176,000	541,700	345,600	591,600	146,000	423,200	154,000	319,700	143,600
Rhode Island	56,057	179,000	93,000	341,000	181,800	334,600	76,600	294,100	76,000	221,500	70,500
South Carolina	76,620	318,000	172,000	609,300	337,300	604,800	142,700	463,100	141,600	348,900	131,500
South Dakota	52,678	157,000	83,000	305,800	162,300	302,100	68,300	234,000	67,400	176,500	62,700
Tennessee	93,043	429,000	229,000	872,200	447,800	910,100	189,700	718,700	189,400	541,800	176,100
Texas	182,991	1,037,000	570,000	2,837,500	1,117,200	2,795,600	474,600	2,240,800	476,800	1,688,000	442,500
Trust Territory*	45,904	--	--	--	--	--	--	170,800	48,200	128,900	44,700
Utah	58,215	194,000	105,000	405,200	206,200	402,000	86,900	319,600	86,200	241,300	80,400
Vermont	50,086	139,000	74,000	283,500	145,300	278,800	61,000	221,900	60,300	167,300	56,000
Virginia	101,078	483,000	262,000	992,800	514,000	901,900	217,900	769,700	217,500	580,400	202,200
Virgin Islands	45,612	109,000	58,000	223,900	113,500	220,900	47,400	171,100	47,100	129,100	43,900
Washington	84,867	374,000	204,000	754,500	399,100	772,000	169,000	474,100	168,000	358,000	156,600
West Virginia	65,687	244,000	130,000	522,400	254,200	512,300	107,300	399,500	106,800	301,300	99,400
Wisconsin	98,239	464,000	245,000	1,025,300	479,800	1,006,200	203,300	812,500	202,300	613,300	188,500
Wyoming	48,784	130,000	71,000	304,700	138,400	301,200	58,100	237,100	57,300	178,800	53,300
Total	$4,998,900	$22,500,000	$12,000,000	$47,000,000	$23,500,000	$47,000,000	$10,000,000	$37,000,000	$10,000,000	$27,900,000	$9,300,000
Less	45,904										
Grand Total	$4,952,996										

*Trust Territory of the Pacific withdrew, but funds were reserved.

1981 REPORTED SAVINGS FOR REQUIRED AND ADDITIONAL PROGRAM MEASURES, BY STATE (TRILLION BTUS) Appendix A

STATE	REQUIRED	ADDITIONAL	TOTAL
ALABAMA	6.55	97.22	103.77
ALASKA	7.68	0.00	7.68
ARIZONA	5.71	0.48	6.19
ARKANSAS	6.23	4.93	11.16
CALIFORNIA	70.55	17.59	88.14
COLORADO	24.38	28.71	53.09
CONNECTICUT	23.84	38.61	62.45
DELAWARE	3.19	6.99	10.18
DISTRICT OF COLUMBIA	7.55	5.40	12.95
FLORIDA	58.98	17.01	75.99
GEORGIA	107.81	6.57	114.38
HAWAII	3.59	12.97	16.56
IDAHO	1.67	2.55	4.22
ILLINOIS	5.60	35.26	40.86
INDIANA	88.04	73.76	161.80
IOWA	17.60	154.38	171.98
KANSAS	7.93	3.48	11.41
KENTUCKY	9.09	97.48	106.57
LOUISIANA	0.48	2.15	2.63
MAINE	0.25	10.69	10.94
MARYLAND	21.68	41.80	63.48
MASSACHUSETTS	70.81	63.85	134.66
MICHIGAN	16.24	0.00	16.24
MINNESOTA	61.37	7.14	68.51
MISSISSIPPI	9.99	5.04	15.03
MISSOURI	31.56	15.41	46.97
MONTANA	3.35	8.64	11.99
NEBRASKA	11.38	10.36	21.74
NEVADA	5.78	3.80	9.58
NEW HAMPSHIRE	6.32	13.29	19.61
NEW JERSEY	24.85	35.05	59.90
NEW MEXICO	14.16	15.22	29.38
NEW YORK	120.93	98.66	219.59
NORTH CAROLINA	45.31	58.03	103.34
NORTH DAKOTA	1.95	1.56	3.51
OHIO	113.86	96.94	210.80
OKLAHOMA	94.11	89.45	183.56
OREGON	4.18	2.12	6.30
PENNSYLVANIA	94.63	58.21	152.84
RHODE ISLAND	4.73	0.02	4.75
SOUTH CAROLINA	15.01	41.48	56.49
SOUTH DAKOTA	0.56	2.77	3.33
TENNESSEE	46.31	77.22	123.53
TEXAS	314.42	6.45	320.87
UTAH	5.56	4.87	10.43
VERMONT	6.14	11.96	18.10
VIRGINIA	1.31	0.30	1.61
WASHINGTON	4.41	0.25	4.66
WEST VIRGINIA	14.02	6.64	20.66
WISCONSIN	55.93	50.43	106.36
WYOMING	5.09	0.08	5.17
AMERICAN SAMOA	0.10	0.23	0.33
GUAM	0.31	0.04	0.35
COM NORTHERN MARIANA IS	0.02	0.00	0.02
PUERTO RICO	0.90	12.22	13.12
TERRITORIES	0.00	0.00	0.00
VIRGIN ISLANDS	0.29	44.67	44.96
TOTALS (TRILLION BTUS):	1684.29	1500.43	3184.72

REPORTED 1981 STATE ENERGY SAVINGS ESTIMATES FOR REQUIRED PROGRAM MEASURES (TRILLION BTUS)

Appendix B

STATE	THERM	LIGHT	BOTH	TRANS	RTOP	PROCR	AUDIT	EDUC	COORD	TOTAL
ALABAMA	0.00	0.00	3.86	0.01	0.70	0.00	1.80	0.00	0.18	6.55
ALASKA	0.00	0.00	0.00	0.44	0.00	0.00	5.82	0.00	1.42	7.68
ARIZONA	0.00	0.00	0.00	5.65	0.00	0.06	0.00	0.00	0.00	5.71
ARKANSAS	0.00	0.00	3.17	1.95	0.00	1.00	0.11	0.00	0.00	6.23
CALIFORNIA	10.11	0.00	55.31	5.13	0.00	0.00	0.00	0.00	0.00	70.55
COLORADO	0.00	18.96	0.00	0.47	0.00	0.76	2.39	0.00	1.80	24.38
CONNECTICUT	0.00	0.00	18.35	4.91	0.42	0.16	0.00	0.00	0.00	23.84
DELAWARE	0.98	0.00	0.00	0.39	0.12	0.04	1.61	0.04	0.01	3.19
DISTRICT OF COLUMBIA	0.50	1.37	0.00	2.72	0.07	2.04	0.85	0.00	0.00	7.55
FLORIDA	0.00	0.00	40.59	10.93	5.62	0.07	1.77	0.00	0.00	58.98
GEORGIA	0.00	0.00	12.30	0.00	0.00	0.00	95.51	0.00	0.00	107.81
HAWAII	0.00	0.00	2.20	0.18	0.00	0.39	0.82	0.00	0.00	3.59
IDAHO	0.00	0.00	0.16	0.00	0.04	0.09	1.38	0.00	0.00	1.67
ILLINOIS	0.00	0.00	1.86	0.01	0.00	1.88	1.85	0.00	0.00	5.60
INDIANA	0.00	0.00	42.64	5.93	0.00	0.32	3.15	36.00	0.00	88.04
IOWA	12.07	3.80	0.00	0.42	0.14	0.91	0.00	0.26	0.00	17.60
KANSAS	6.37	0.15	0.00	0.14	0.00	0.06	1.01	0.20	0.00	7.93
KENTUCKY	0.00	0.00	4.72	3.16	0.00	0.50	0.05	0.66	0.00	9.09
LOUISIANA	0.00	0.00	0.00	0.22	0.23	0.03	0.00	0.00	0.00	0.48
MAINE	0.12	0.00	0.00	0.11	0.02	0.00	0.00	0.00	0.00	0.25
MARYLAND	3.25	0.00	0.00	16.58	0.24	0.25	1.36	0.00	0.00	21.68
MASSACHUSETTS	0.00	0.00	32.19	0.07	0.41	0.77	17.57	19.80	0.00	70.81
MICHIGAN	9.65	2.40	0.00	1.80	0.38	1.48	0.38	0.15	0.00	16.24
MINNESOTA	0.00	0.00	49.03	2.10	0.14	0.00	7.74	0.00	2.36	61.37
MISSISSIPPI	0.00	0.00	6.82	2.92	0.20	0.00	0.05	0.00	0.00	9.99
MISSOURI	0.00	0.00	0.00	25.24	0.00	0.00	1.19	5.13	0.00	31.56
MONTANA	0.00	0.00	3.12	0.00	0.00	0.02	0.20	0.01	0.00	3.35
NEBRASKA	0.00	0.00	0.00	11.38	0.00	0.00	0.00	0.00	0.00	11.38
NEVADA	3.14	1.93	0.00	0.52	0.00	0.00	0.15	0.04	0.00	5.78
NEW HAMPSHIRE	2.92	0.00	0.00	0.01	0.00	0.08	1.13	2.18	0.00	6.32
NEW JERSEY	0.00	0.00	17.75	0.50	1.10	0.10	5.40	0.00	0.00	24.85
NEW MEXICO	0.00	0.00	13.87	0.00	0.00	0.23	0.00	0.06	0.00	14.16
NEW YORK	11.76	11.29	0.00	0.11	0.71	1.79	4.80	89.77	0.70	120.93
NORTH CAROLINA	29.93	6.05	0.00	0.65	0.00	0.38	2.53	5.57	0.20	45.31
NORTH DAKOTA	0.00	0.00	1.16	0.09	0.00	0.18	0.01	0.51	0.00	1.95
OHIO	0.00	22.15	22.74	38.04	0.00	0.00	3.74	26.74	0.45	113.86
OKLAHOMA	0.00	0.00	9.60	4.28	0.00	2.14	38.81	39.28	0.00	94.11
OREGON	0.00	0.00	1.79	0.00	0.00	0.00	2.33	0.00	0.06	4.18
PENNSYLVANIA	3.00	50.35	0.00	37.85	0.01	0.07	3.35	0.00	0.00	94.63
RHODE ISLAND	2.34	0.01	0.00	0.00	0.03	0.00	0.58	1.77	0.00	4.73
SOUTH CAROLINA	3.80	1.70	0.00	7.95	1.38	0.18	0.00	0.00	0.00	15.01
SOUTH DAKOTA	0.00	0.00	0.01	0.01	0.02	0.00	0.12	0.00	0.40	0.56
TENNESSEE	4.51	0.00	0.00	2.31	0.18	0.13	15.86	23.32	0.00	46.31
TEXAS	0.00	0.00	6.96	1.19	0.00	0.27	306.00	0.00	0.00	314.42
UTAH	0.00	0.00	5.40	0.00	0.00	0.00	0.02	0.14	0.00	5.56
VERMONT	0.96	0.00	0.00	4.63	0.01	0.00	0.54	0.00	0.00	6.14
VIRGINIA	0.84	0.00	0.00	0.02	0.45	0.00	0.00	0.00	0.00	1.31
WASHINGTON	0.00	0.00	1.97	0.00	0.00	0.11	0.01	0.05	2.27	4.41
WEST VIRGINIA	0.13	2.23	0.00	0.40	0.00	0.07	10.70	0.49	0.00	14.02
WISCONSIN	0.00	0.00	48.66	0.22	0.17	2.31	4.57	0.00	0.00	55.93
WYOMING	0.00	0.00	0.79	3.96	0.02	0.29	0.03	0.00	0.00	5.09
AMERICAN SAMOA	0.00	0.00	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.10
GUAM	0.05	0.00	0.00	0.00	0.00	0.01	0.03	0.21	0.01	0.31
COM NORTHERN MARIANA IS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
PUERTO RICO	0.00	0.00	0.57	0.00	0.08	0.24	0.01	0.00	0.00	0.90
TERRITORIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VIRGIN ISLANDS	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.29
TOTALS (TRILLION BTUS):	136.43	122.39	407.62	205.96	12.89	19.41	547.33	252.38	9.88	1684.29

REPORTED 1981 STATE ENERGY SAVINGS ESTIMATES FOR ADDITIONAL PROGRAM MEASURES, BY SECTOR (TRILLION BTUS) Appendix C

STATE SECTOR:	AGRIC	INDUST	TRANSP	UTILITY	BLDGS	GOVMNT	OTHER	TOTAL
ALABAMA	0.00	95.90	0.00	0.00	0.27	0.00	1.05	97.22
ALASKA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ARIZONA	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.48
ARKANSAS	1.24	1.30	0.00	0.00	0.00	2.39	0.00	4.93
CALIFORNIA	0.00	0.00	0.00	17.59	0.00	0.00	0.00	17.59
COLORADO	0.00	0.00	0.91	0.00	19.25	0.00	0.00	28.71
CONNECTICUT	0.00	3.09	3.32	0.00	30.22	1.98	0.00	38.61
DELAWARE	0.15	0.00	1.45	1.09	4.29	0.01	0.00	6.99
DISTRICT OF COLUMBIA	0.09	0.00	2.25	0.26	1.53	1.27	0.00	5.40
FLORIDA	0.60	1.02	5.62	0.00	9.28	0.49	0.00	17.01
GEORGIA	0.00	0.00	0.67	0.00	5.90	0.00	0.00	6.57
HAWAII	0.00	4.59	0.00	0.00	8.38	0.00	0.00	12.97
IDAHO	1.92	0.00	0.00	0.00	0.44	0.00	0.00	2.55
ILLINOIS	0.00	0.70	0.00	9.60	24.96	0.00	0.00	35.26
INDIANA	4.37	69.39	0.00	0.00	0.00	0.00	0.00	73.76
IOWA	21.63	0.00	13.14	7.22	104.07	5.59	2.62	154.38
KANSAS	0.21	0.00	0.56	0.79	1.81	0.11	0.00	3.48
KENTUCKY	0.19	0.00	2.76	0.00	92.14	0.27	0.00	97.48
LOUISIANA	0.00	0.00	0.00	0.00	2.15	0.00	0.00	2.15
MAINE	0.00	6.72	0.00	0.00	3.97	0.00	0.00	10.69
MARYLAND	0.51	7.36	15.26	0.00	18.67	0.00	0.00	41.80
MASSACHUSETTS	0.00	2.00	1.68	0.00	8.28	51.71	0.00	63.85
MICHIGAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MINNESOTA	0.00	0.27	0.00	0.00	6.28	0.00	0.00	7.14
MISSISSIPPI	0.00	0.00	5.00	0.00	0.04	0.00	0.00	5.04
MISSOURI	0.00	0.00	0.00	0.00	12.65	0.00	0.00	15.41
MONTANA	0.00	0.00	0.62	0.00	1.25	6.77	0.00	8.64
NEBRASKA	0.00	0.00	0.00	0.18	9.73	0.45	0.00	10.36
NEVADA	0.00	0.00	0.13	2.64	0.66	0.04	0.00	3.80
NEW HAMPSHIRE	0.00	0.89	1.51	0.10	10.43	0.36	0.00	13.29
NEW JERSEY	0.00	23.00	0.00	0.00	7.19	2.80	2.06	35.05
NEW MEXICO	0.00	0.00	2.60	5.38	7.24	0.00	0.00	15.22
NEW YORK	8.68	19.90	8.27	20.18	38.86	2.77	0.00	98.66
NORTH CAROLINA	5.97	32.51	0.66	0.00	15.33	0.00	0.00	58.03
NORTH DAKOTA	1.18	0.00	0.09	0.00	0.14	0.11	0.00	1.56
OHIO	3.14	91.99	0.00	0.00	1.79	0.00	0.02	96.94
OKLAHOMA	0.00	0.00	0.60	0.00	63.32	25.53	0.00	89.45
OREGON	0.00	0.01	0.00	0.00	1.38	0.73	0.00	2.12
PENNSYLVANIA	0.00	47.43	8.93	0.00	1.85	0.00	0.00	58.21
RHODE ISLAND	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02
SOUTH CAROLINA	0.00	18.80	4.90	0.00	14.66	3.06	0.00	41.48
SOUTH DAKOTA	0.06	1.01	0.35	0.00	0.23	1.08	0.00	2.77
TENNESSEE	0.00	41.08	1.15	0.00	31.94	0.56	0.00	77.22
TEXAS	0.00	0.00	0.00	0.00	0.00	6.45	0.00	6.45
UTAH	0.07	2.14	1.07	0.00	1.40	0.00	0.00	4.87
VERMONT	0.00	3.44	0.84	0.00	7.68	0.00	0.00	11.96
VIRGINIA	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.30
WASHINGTON	0.00	0.03	0.00	0.00	0.22	0.00	0.00	0.25
WEST VIRGINIA	0.00	0.00	0.00	0.00	6.62	0.01	0.00	6.64
WISCONSIN	0.00	1.40	5.37	0.71	42.95	0.00	0.00	50.43
WYOMING	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.08
AMERICAN SAMOA	0.00	0.00	0.05	0.16	0.00	0.02	0.00	0.23
GUAM	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.04
COM NORTHERN MARIANA IS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PUERTO RICO	0.00	0.00	9.18	2.36	0.60	0.08	0.00	12.22
TERRITORIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VIRGIN ISLANDS	0.00	44.67	0.00	0.00	0.00	0.00	0.00	44.67
TOTALS (TRILLION BTUS):	50.02	520.65	98.94	68.26	620.40	115.12	5.75	1500.43

UNITED STATES
DEPARTMENT OF ENERGY
WASHINGTON, D.C. 20585

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